

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0033243; AI 19830; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Coushatta
Coushatta Wastewater Treatment Facility
P.O. Box 531
Coushatta, LA 71019
- II. **PREPARED BY:** Eura DeHart

DATE PREPARED: March 16, 2009
- III. **PERMIT ACTION:** reissue LPDES permit LA0033243, AI 19830; PER20090001

LPDES application received: January 15, 2009

EPA has not retained enforcement authority.

LPDES permit issued: May 24, 2004
LPDES permit expires: May 31, 2009

IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Coushatta and the Village of Edgefield.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on Riddle Street in Coushatta, Caddo Parish.
- D. The treatment facility consists of a three-cell oxidation lagoon. Disinfection is by chlorination.
- E. Outfall 001

Discharge Location: Latitude 32° 1' 30" North
Longitude 93° 21' 10" West

Description: treated sanitary wastewater

Design Capacity: 0.50 MGD

Type of Flow Measurement which the facility is currently using:
Totalizing meter

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V. RECEIVING WATERS:

The discharge is into Posey Branch, thence into the Red River in segment 100101 of the Red River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 100101 of the Red River Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Not Supported	N/A	Not Supported	N/A	Full

^{1/}The designated uses and degree of support for Segment 100101 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 100101 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or-eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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For additional information, contact:

Mr. Eura DeHart
 Water Permits Division
 Department of Environmental Quality
 Office of Environmental Services
 P. O. Box 4313
 Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 100101, Red River – Arkansas State Line to Alexandria (Hwy. 165), is listed on LDEQ's Final 2006 303(d) List as impaired for sulfates and color. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Red River Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Sulfates

A reporting requirement for sulfates is being placed into the permit for information gathering purposes to address the sulfate impairment.

Color

The suspected cause of impairment is from upstream sources. Based on the size and nature of the facility and the flow of the Red River, the Department believes there is little potential for the discharge to cause or contribute to the color impairment of this subsegment.

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	125.1	30 mg/l	45 mg/l	Limits are set in accordance with the Wasteload Allocation (WLA-134) for the Town of Coushatta

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Effluent Characteristic	Monthly Avg (lbs./day)	Monthly Avg	Weekly Avg	Basis
TSS	375.3	90 mg/l	135 mg/l	Limits are set in accordance with the Wasteload Allocation (WLA-134) for the Town of Coughatta
Dissolved Oxygen	---	6 mg/l	N/A	Limits are set in accordance with the Wasteload Allocation (WLA-134) for the Town of Coughatta
Sulfate	Report	---	---	Because the receiving waterbody is impaired for sulfate, "Report" has been placed into the permit for information gathering purposes.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

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X. PREVIOUS PERMITS:

LPDES Permit No. LA0033243: Issued: May 24, 2004
 Expires: May 31, 2009

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	30 mg/l	45 mg/l	2/month	Grab
TSS	90 mg/l	135 mg/l	2/month	Grab
Dissolved Oxygen	6 mg/l (min)	---	2/month	Grab
Sulfate	Report (lbs./day)		1/quarter	Grab
Fecal Coliform Colonies	200	400	2/month	Grab
pH	6.0 (min.)	9.0 (max.)	2/month	Grab

The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the most recent inspection of the facility was conducted on September 8, 2006. The following was noted:

- The facility is made up of a three-cell oxidation pond.
- Effluent is discharge into the Red River (100101).
- Permit is valid and current.
- Records kept and are up to date. No permit limit violations.
- Effluent is clear and free from solids, turbidity, and foam.
- Ponds are well maintained and are operating at satisfactory levels.
- Laboratory analysis results are satisfactory. Gulf States Lab, Shreveport, LA is the contract lab.

B) Compliance and/or Administrative Orders

A review of the files indicates there are no recent enforcement actions administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January 2006 through December 2008 has revealed the following violations:

<u>Parameter</u>	<u>Outfall</u>	<u>Period of Excursion</u>	<u>Permit Limit</u>	<u>Reported Quantity</u>
BOD ₅ (loading)	001	August 2007	72.6 lbs/day	81.3 lbs/day
pH	001	February 2008	6.0 – 9.0	Not reported
BOD ₅ (loading)	001	March 2008	72.6 lbs/day	103.0 lbs/day
TSS (loading)	001	October 2008	217.6 lbs/day	228.2 lbs/day

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XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2903, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.50 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.50 \text{ MGD} \times 30 \text{ mg/l} = 125.1 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between **0.10** and **0.5** MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Dissolved Oxygen	2/month	Grab
Sulfate	1/quarter	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

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Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Coushatta, Coushatta Wastewater Treatment Facility, January 15, 2009.